

chordwise from said leading edge, and

a region having deep compressive residual stresses  
10 imparted by laser shock peening (LSP) extending into said  
airfoil from said laser shock peened surface wherein said deep  
compressive residual stresses extend from said laser shocked  
peened surface to a depth in a range of about 20-50 mils into  
said region.

sub 6.4

6. (AMENDED) A gas turbine engine compressor blade  
comprising:

a metallic airfoil having a leading edge and a trailing  
edge and a pressure side and a suction side,

5 at least one laser shock peened surface on at least one  
side of said airfoil,

said laser shock peened surface extending radially along  
at least a portion of said leading edge and extending  
chordwise from said leading edge, and

10 a region having deep compressive residual stresses  
imparted by laser shock peening (LSP) extending into said  
airfoil from said laser shock peened surface wherein said deep  
compressive residual stresses extend from said laser shocked  
peened surface to a depth in a range of about 20-50 mils into  
15 said region.

sub 6.6

11. (AMENDED) A gas turbine engine compressor blade  
comprising:

a metallic airfoil having a leading edge and a trailing  
edge,

5 at least one laser shock peened surface on at least one  
side of said airfoil,

said laser shock peened surface extending radially at  
least along a portion of said trailing edge and extending  
chordwise from said trailing edge, and

10 a region having deep compressive residual stresses  
imparted by laser shock peening (LSP) extending into said  
airfoil from said laser shock peened surface wherein said deep  
compressive residual stresses extend from said laser shocked